

General

Title

Antipsychotic use in persons with dementia: percentage of long-stay nursing home residents with dementia who are persistently receiving an antipsychotic medication without evidence of a psychotic disorder or related condition.

Source(s)

Pharmacy Quality Alliance (PQA). Technical specifications for PQA approved measures. Springfield (VA): Pharmacy Quality Alliance (PQA); 2015 Jul. 66 p.

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Process

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the percentage of skilled nursing home long-stay residents 18 years and older with dementia who are persistently receiving an antipsychotic medication without evidence of a psychotic disorder or related condition.

The unit of measure is a nursing home facility.

Rationale

There is growing public concern about psychotropic use in elderly, institutionalized patients because recent studies have identified higher rates of morbidity and mortality when treatment is not for an Food and Drug Administration (FDA)-approved indication (Alexander et al., 2011; Briesacher et al., 2005; Gill et al., 2007; Huybrechts et al., 2012; Kales et al., 2007; Liperoti et al., 2009; Maher et al., 2011; Office of the Inspector General, 2011; Schneeweiss et al., 2007; Schneider, Dagerman, & Insel, 2006; Vigen et al.,

2011).

Pilot testing results showed that patients included in the measure numerator (indicating persistent use of antipsychotic medications) were at a higher risk of any falls, falls with no injury, or falls with injury (except major), compared with residents who were not counted in the quality measure numerator.

Evidence for Rationale

Alexander GC, Gallagher SA, Mascola A, Moloney RM, Stafford RS. Increasing off-label use of antipsychotic medications in the United States, 1995-2008. *Pharmacoepidemiol Drug Saf.* 2011 Feb;20(2):177-84. [PubMed](#)

Briesacher BA, Limcangco MR, Simoni-Wastila L, Doshi JA, Levens SR, Shea DG, Stuart B. The quality of antipsychotic drug prescribing in nursing homes. *Arch Intern Med.* 2005 Jun 13;165(11):1280-5. [PubMed](#)

Gill SS, Bronskill SE, Normand SL, Anderson GM, Sykora K, Lam K, Bell CM, Lee PE, Fischer HD, Herrmann N, Gurwitz JH, Rochon PA. Antipsychotic drug use and mortality in older adults with dementia. *Ann Intern Med.* 2007 Jun 5;146(11):775-86. [PubMed](#)

Huybrechts KF, Gerhard T, Crystal S, Olfson M, Avorn J, Levin R, Lucas JA, Schneeweiss S. Differential risk of death in older residents in nursing homes prescribed specific antipsychotic drugs: population based cohort study. *BMJ.* 2012;344:e977. [PubMed](#)

Kales HC, Valenstein M, Kim HM, McCarthy JF, Ganoczy D, Cunningham F, Blow FC. Mortality risk in patients with dementia treated with antipsychotics versus other psychiatric medications. *Am J Psychiatry.* 2007 Oct;164(10):1568-76; quiz 1623. [PubMed](#)

Liperoti R, Onder G, Landi F, Lapane KL, Mor V, Bernabei R, Gambassi G. All-cause mortality associated with atypical and conventional antipsychotics among nursing home residents with dementia: a retrospective cohort study. *J Clin Psychiatry.* 2009 Oct;70(10):1340-7. [PubMed](#)

Maher AR, Maglione M, Bagley S, Suttorp M, Hu JH, Ewing B, Wang Z, Timmer M, Sultzer D, Shekelle PG. Efficacy and comparative effectiveness of atypical antipsychotic medications for off-label uses in adults: a systematic review and meta-analysis. *JAMA.* 2011 Sep 28;306(12):1359-69. [PubMed](#)

Office of Inspector General. Medicare atypical antipsychotic drug claims for elderly nursing home residents. Washington (DC): U.S. Department of Health and Human Service; 2011 May. 48 p.

Pharmacy Quality Alliance (PQA). Technical specifications for PQA approved measures. Springfield (VA): Pharmacy Quality Alliance (PQA); 2014 Sep. 56 p.

Schneeweiss S, Setoguchi S, Brookhart A, Dormuth C, Wang PS. Risk of death associated with the use of conventional versus atypical antipsychotic drugs among elderly patients. *CMAJ.* 2007 Feb 27;176(5):627-32. [PubMed](#)

Schneider LS, Dagerman K, Insel PS. Efficacy and adverse effects of atypical antipsychotics for dementia: meta-analysis of randomized, placebo-controlled trials. *Am J Geriatr Psychiatry.* 2006 Mar;14(3):191-210. [PubMed](#)

Vigen CL, Mack WJ, Keefe RS, Sano M, Sultzer DL, Stroup TS, Dagerman KS, Hsiao JK, Lebowitz BD, Lyketsos CG, Tariot PN, Zheng L, Schneider LS. Cognitive effects of atypical antipsychotic medications in patients with Alzheimer's disease: outcomes from CATIE-AD. *Am J Psychiatry.* 2011 Aug;168(8):831-9. [PubMed](#)

Primary Health Components

Dementia; antipsychotic medication; elderly

Denominator Description

Number of long-stay residents, 18 years and older on the prior assessment, in a skilled nursing facility with an active diagnosis (Section I) of 14200 Alzheimer's disease or 14800 non-Alzheimer dementia on either the prior or the target assessment and/or if cognitive impairment is indicated based on covariate equal to zero on either the prior or the target assessment (see the related "Denominator Inclusions/Exclusions" field)

Numerator Description

Patients in the denominator with use of an antipsychotic medication verified in Section N (N0410A) greater than or equal to 12 days when combining both assessments (see the related "Numerator Inclusions/Exclusions" field)

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Additional Information Supporting Need for the Measure

Unspecified

Extent of Measure Testing

This measure was pilot tested during measure development (see process below), which included reliability and validity testing.

Pharmacy Quality Alliance (PQA) Measure Development Process

PQA develops performance measures through a consensus-driven process to draft, test, refine and endorse measures of medication-use quality.

Step 1: PQA workgroups comprised of experts in all phases of drug use and management identify measure concepts that may be appropriate for development into fully specified performance measures or indicators for organizational internal quality improvement. The workgroups focus on specific aspects of the medication-use system and/or specific therapeutic areas.

Step 2: PQA workgroups recommend measure concepts to the PQA Quality Metrics Expert Panel (QMEP) for evaluation and refinement. The QMEP reviews the measure concepts to provide an initial assessment of the key properties of performance measures (i.e., feasibility, usability and scientific validity). The measure concepts that are rated highly on these key properties will undergo technical specification as draft measures.

Step 3: The draft measures are provided to PQA member organizations for their comments prior to preparing technical specifications for pilot testing. PQA staff use member comments and workgroup and QMEP recommendations to formulate a testing plan for each draft measure.

Step 4: PQA selects partners to test the draft measures. These partners are often PQA member health plans or academic institutions with expertise in quality and performance measure testing. The testing partner implements the draft technical specifications within their existing datasets and provides a report to PQA that details testing results and recommendations for modifications of the technical specifications.

Step 5: The workgroup that developed the measure reviews the testing results and provides comment. The QMEP reviews the workgroup comments, testing results, recommendations and potential modifications and provides a final assessment of the feasibility and scientific validity of the draft performance measures.

Step 6: Measures that are recommended by the QMEP for endorsement are posted on the PQA web site for member review, written comments are requested, and a conference call for member organizations is held to gather feedback and address any questions. This process allows members to discuss their views on the measures in advance of the voting period.

Step 7: PQA member organizations vote on endorsement of the Performance Measures and approval of Quality Improvement Indicators.

Evidence for Extent of Measure Testing

Pharmacy Quality Alliance (PQA). Technical specifications for PQA approved measures. Springfield (VA): Pharmacy Quality Alliance (PQA); 2014 Sep. 56 p.

State of Use of the Measure

State of Use

Pilot testing

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Skilled Nursing Facilities/Nursing Homes

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Single Health Care Delivery or Public Health Organizations

Statement of Acceptable Minimum Sample Size

Specified

Target Population Age

Age greater than or equal to 18 years

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Making Care Safer

Prevention and Treatment of Leading Causes of Mortality

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Living with Illness

IOM Domain

Effectiveness

Safety

Data Collection for the Measure

Case Finding Period

The measurement period

Denominator Sampling Frame

Patients associated with provider

Denominator (Index) Event or Characteristic

Clinical Condition

Institutionalization

Patient/Individual (Consumer) Characteristic

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions

Number of long-stay residents, 18 years and older on the prior assessment, in a skilled nursing facility with an active diagnosis (Section I) of 14200 Alzheimer's disease or 14800 non-Alzheimer dementia on either the prior or the target assessment and/or if cognitive impairment is indicated based on covariate equal to zero on either the prior or the target assessment

Note:

Skilled Nursing Facility – Long-stay Residents: Residents with cumulative days in the facility (CDIF) greater than or equal to 101 days.
Cumulative Days in the Facility: The total number of days within an episode during which the resident was in the facility. It is the sum of the number of days within each stay included in an episode. If an episode consists of more than one stay separated by periods of time outside the facility (e.g., hospitalizations), only those days within the facility would count towards CDIF. Any days outside of the facility (e.g., hospital, home, etc.) would not count towards the CDIF total.
Measurement Period: Quarterly using two consecutive time periods with Minimum Data Set (MDS) assessment.
Facilities reporting must have 30 or more long-stay residents in the denominator.
Refer to the original measure documentation for MDS 3.0 details and administrative codes.

Exclusions

Exclude from the denominator:

Any person in the measurement quarter who does not have a prior assessment and any person where N0410A is missing on either the prior or target assessment

Any person with any of the following active diagnoses from Section I in either the prior or the target assessment:

- I5250 Huntington's Disease
- I5350 Tourette's Syndrome
- I5900 Manic Depression (bipolar disease)
- I6000 Schizophrenia (e.g., schizoaffective and schizophreniform disorders)

Note: Refer to the original measure documentation for MDS 3.0 details and administrative codes.

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions

Patients in the denominator with use of an antipsychotic medication verified in Section N (N0410A)

greater than or equal to 12 days when combining both assessments

Note:

Antipsychotic Medication: Refer to Table 1 in the original measure documentation for additional information.
Refer to the original measure documentation for Minimum Data Set (MDS) 3.0 details and administrative codes.

Exclusions

Unspecified

Numerator Search Strategy

Institutionalization

Data Source

Administrative clinical data

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

Centers for Medicare & Medicaid Services (CMS) Minimum Data Set (MDS) (Version 3.0)

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Desired value is a lower score

Allowance for Patient or Population Factors

not defined yet

Standard of Comparison

not defined yet

Identifying Information

Original Title

Antipsychotic use in persons with dementia - MDS.

Measure Collection Name

Pharmacy Quality Alliance (PQA) Measures

Measure Set Name

Medication Safety Measures

Submitter

Pharmacy Quality Alliance - Clinical Quality Collaboration

Developer

Pharmacy Quality Alliance - Clinical Quality Collaboration

Funding Source(s)

None

Composition of the Group that Developed the Measure

PQA Workgroup

Financial Disclosures/Other Potential Conflicts of Interest

None

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2015 Jul

Measure Maintenance

Annually

Date of Next Anticipated Revision

Unspecified

Measure Status

This is the current release of the measure.

The measure developer reaffirmed the currency of this measure in November 2015.

Measure Availability

Source not available electronically.

For more information, contact the Pharmacy Quality Alliance (PQA) at 6213 Old Keene Mill Court, Springfield, VA 22152; Phone: 703-690-1987; Fax: 703-842-8150; Web site: www.pqaalliance.org
; Email: info@PQAalliance.org.

NQMC Status

This NQMC summary was completed by ECRI Institute on April 1, 2015. The information was verified by the developer on April 20, 2015.

The information was reaffirmed by the measure developer on November 2, 2015.

Copyright Statement

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Production

Source(s)

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